

AMENDED IN SENATE SEPTEMBER 4, 2009

AMENDED IN SENATE SEPTEMBER 1, 2009

AMENDED IN SENATE JULY 16, 2009

AMENDED IN ASSEMBLY APRIL 16, 2009

CALIFORNIA LEGISLATURE—2009—10 REGULAR SESSION

ASSEMBLY BILL

No. 560

Introduced by Assembly Member Skinner

*(Coauthors: Assembly Members Beall, Blumenfield, Chesbro, and
Salas)*

(Coauthors: Senators Kehoe, Pavley, and Wiggins)

February 25, 2009

An act to amend Section 2827 of the Public Utilities Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 560, as amended, Skinner. Net energy metering.

Existing law relative to private energy producers requires every electric distribution utility or cooperative, as defined, to make available to an eligible customer-generator, as defined, a standard contract or tariff for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer-generators exceeds 2.5% of the electric distribution utility or cooperative's aggregate customer peak demand.

This bill would require that the standard contract or tariff for net energy metering be offered on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer-generators exceeds ~~3.5%~~ 5% of the ~~electric~~ electricity

distribution utility or cooperative's aggregate customer peak demand. *The bill would prohibit, on and after July 1, 2010, a contractor holding a class C-46 license issued by the Contractors' State License Board from constructing, altering, or installing, for an eligible customer-generator generating electricity under a tariff or contract pursuant to these provisions, a solar photovoltaic electrical generating facility with the capacity to generate greater than 250 kilowatts of electricity. This bill would incorporate additional changes in Section 2827 of the Public Utilities Code, proposed by AB 920 or SB 7, to be operative only if either AB 920 or SB 7 and this bill are chaptered and become effective on or before January 1, 2010, and this bill is chaptered last.*

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. Section 2827 of the Public Utilities Code is
2 amended to read:
3 2827. (a) The Legislature finds and declares that a program
4 to provide net energy metering, co-energy metering, and wind
5 energy co-metering for eligible customer-generators is one way
6 to encourage substantial private investment in renewable energy
7 resources, stimulate in-state economic growth, reduce demand for
8 electricity during peak consumption periods, help stabilize
9 California's energy supply infrastructure, enhance the continued
10 diversification of California's energy resource mix, and reduce
11 interconnection and administrative costs for electricity suppliers.
12 (b) As used in this section, the following terms have the
13 following meanings:
14 (1) "Co-energy metering" means a program that is the same in
15 all other respects as a net energy metering program, except that
16 the local publicly owned electric utility has elected to apply a
17 generation-to-generation energy and time-of-use credit formula
18 as provided in subdivision (i).
19 (2) "Electrical cooperative" means an electrical cooperative as
20 defined in Section 2776.
21 (3) ~~"Electric"~~ "Electricity distribution utility or cooperative"
22 means an electrical corporation, a local publicly owned electric
23 utility, or an electrical cooperative, or any other entity, except an

1 electric service provider, that offers electrical service. This section
2 shall not apply to a local publicly owned electric utility that serves
3 more than 750,000 customers and that also conveys water to its
4 customers.

5 (4) “Eligible customer-generator” means a residential, small
6 commercial customer as defined in subdivision (h) of Section 331,
7 commercial, industrial, or agricultural customer of an electricity
8 distribution utility or cooperative, who uses a solar or a wind
9 turbine electrical generating facility, or a hybrid system of both,
10 with a capacity of not more than one megawatt that is located on
11 the customer’s owned, leased, or rented premises, is interconnected
12 and operates in parallel with the electric grid, and is intended
13 primarily to offset part or all of the customer’s own electrical
14 requirements.

15 (5) “Net energy metering” means measuring the difference
16 between the electricity supplied through the electric grid and the
17 electricity generated by an eligible customer-generator and fed
18 back to the electric grid over a 12-month period as described in
19 subdivision (h). An eligible customer-generator who already owns
20 an existing solar or wind turbine electrical generating facility, or
21 a hybrid system of both, is eligible to receive net energy metering
22 service in accordance with this section.

23 (6) “Ratemaking authority” means, for an electrical corporation,
24 electrical cooperative, or electric service provider, the commission,
25 and for a local publicly owned electric utility, the local elected
26 body responsible for setting the rates of the local publicly owned
27 utility.

28 (7) “Wind energy co-metering” means any wind energy project
29 greater than 50 kilowatts, but not exceeding one megawatt, where
30 the difference between the electricity supplied through the electric
31 grid and the electricity generated by an eligible customer-generator
32 and fed back to the electric grid over a 12-month period is as
33 described in subdivision (h). Wind energy co-metering shall be
34 accomplished pursuant to Section 2827.8.

35 (c) (1) Every electricity distribution utility or cooperative shall
36 develop a standard contract or tariff providing for net energy
37 metering, and shall make this standard contract or tariff available
38 to eligible customer-generators, upon request, on a
39 first-come-first-served basis until the time that the total rated
40 generating capacity used by eligible customer-generators exceeds

1 3.5 5 percent of the electricity distribution utility or cooperative's
2 aggregate customer peak demand. Net energy metering shall be
3 accomplished using a single meter capable of registering the flow
4 of electricity in two directions. An additional meter or meters to
5 monitor the flow of electricity in each direction may be installed
6 with the consent of the customer-generator, at the expense of the
7 electricity distribution utility or cooperative, and the additional
8 metering shall be used only to provide the information necessary
9 to accurately bill or credit the customer-generator pursuant to
10 subdivision (h), or to collect solar or wind electric generating
11 system performance information for research purposes. If the
12 existing electrical meter of an eligible customer-generator is not
13 capable of measuring the flow of electricity in two directions, the
14 customer-generator shall be responsible for all expenses involved
15 in purchasing and installing a meter that is able to measure
16 electricity flow in two directions. If an additional meter or meters
17 are installed, the net energy metering calculation shall yield a result
18 identical to that of a single meter.

19 (2) (A) On an annual basis, beginning in 2003, every electricity
20 distribution utility or cooperative shall make available to the
21 ratemaking authority information on the total rated generating
22 capacity used by eligible customer-generators that are customers
23 of that provider in the provider's service area.

24 (B) An electric service provider operating pursuant to Section
25 394 shall make available to the ratemaking authority the
26 information required by this paragraph for each eligible
27 customer-generator that is their customer for each service area of
28 an electric corporation, local publicly owned electric utility, or
29 electrical cooperative, in which the customer has net energy
30 metering.

31 (C) The ratemaking authority shall develop a process for making
32 the information required by this paragraph available to electricity
33 distribution utilities and cooperatives, and for using that
34 information to determine when, pursuant to paragraphs (1) and
35 (3), an electricity distribution utility or cooperative is not obligated
36 to provide net energy metering to additional customer-generators
37 in its service area.

38 (3) An electricity distribution utility or cooperative is not
39 obligated to provide net energy metering to additional
40 customer-generators in its service area when the combined total

1 peak demand of all customer-generators served by all the electricity
2 distribution utilities or cooperatives in that service area furnishing
3 net energy metering to eligible customer-generators exceeds ~~3.5~~
4 5 percent of the aggregate customer peak demand of those
5 electricity distribution utilities or cooperatives.

6 (4) By January 1, 2010, the commission, in consultation with
7 the Energy Commission, shall submit a report to the Governor and
8 the Legislature on the costs and benefits of net energy metering,
9 wind energy co-metering, and co-energy metering to participating
10 customers and nonparticipating customers and with options to
11 replace the economic costs and benefits of net energy metering,
12 wind energy co-metering, and co-energy metering with a
13 mechanism that more equitably balances the interests of
14 participating and nonparticipating customers, and that incorporates
15 the findings of the report on economic and environmental costs
16 and benefits of net metering required by subdivision (n).

17 (d) Every electricity distribution utility or cooperative shall
18 make all necessary forms and contracts for net energy metering
19 service available for download from the Internet.

20 (e) (1) Every electricity distribution utility or cooperative shall
21 ensure that requests for establishment of net energy metering are
22 processed in a time period not exceeding that for similarly situated
23 customers requesting new electric service, but not to exceed 30
24 working days from the date it receives a completed application
25 form for net energy metering service, including a signed
26 interconnection agreement from an eligible customer-generator
27 and the electric inspection clearance from the governmental
28 authority having jurisdiction.

29 (2) Every electricity distribution utility or cooperative shall
30 ensure that requests for an interconnection agreement from an
31 eligible customer-generator are processed in a time period not to
32 exceed 30 working days from the date it receives a completed
33 application form from the eligible customer-generator for an
34 interconnection agreement.

35 (3) If an electricity distribution utility or cooperative is unable
36 to process a request within the allowable timeframe pursuant to
37 paragraph (1) or (2), it shall notify the eligible customer-generator
38 and the ratemaking authority of the reason for its inability to
39 process the request and the expected completion date.

1 (f) (1) If a customer participates in direct transactions pursuant
2 to paragraph (1) of subdivision (b) of Section 365 with an electric
3 service provider that does not provide distribution service for the
4 direct transactions, the electricity distribution utility or cooperative
5 that provides distribution service for an eligible customer-generator
6 is not obligated to provide net energy metering to the customer.

7 (2) If a customer participates in direct transactions pursuant to
8 paragraph (1) of subdivision (b) of Section 365 with an electric
9 service provider, and the customer is an eligible
10 customer-generator, the electricity distribution utility or cooperative
11 that provides distribution service for the direct transactions may
12 recover from the customer's electric service provider the
13 incremental costs of metering and billing service related to net
14 energy metering in an amount set by the ratemaking authority.

15 (g) Except for the time-variant kilowatthour pricing portion of
16 any tariff adopted by the commission pursuant to paragraph (4) of
17 subdivision (a) of Section 2851, each net energy metering contract
18 or tariff shall be identical, with respect to rate structure, all retail
19 rate components, and any monthly charges, to the contract or tariff
20 to which the same customer would be assigned if the customer did
21 not use an eligible solar or wind electrical generating facility,
22 except that eligible customer-generators shall not be assessed
23 standby charges on the electrical generating capacity or the
24 kilowatthour production of an eligible solar or wind electrical
25 generating facility. The charges for all retail rate components for
26 eligible customer-generators shall be based exclusively on the
27 customer-generator's net kilowatthour consumption over a
28 12-month period, without regard to the customer-generator's choice
29 as to whom it purchases electricity that is not self-generated. Any
30 new or additional demand charge, standby charge, customer charge,
31 minimum monthly charge, interconnection charge, or any other
32 charge that would increase an eligible customer-generator's costs
33 beyond those of other customers who are not eligible
34 customer-generators in the rate class to which the eligible
35 customer-generator would otherwise be assigned if the customer
36 did not own, lease, rent, or otherwise operate an eligible solar or
37 wind electrical generating facility is contrary to the intent of this
38 section, and shall not form a part of net energy metering contracts
39 or tariffs.

1 (h) For eligible residential and small commercial
2 customer-generators, the net energy metering calculation shall be
3 made by measuring the difference between the electricity supplied
4 to the eligible customer-generator and the electricity generated by
5 the eligible customer-generator and fed back to the electric grid
6 over a 12-month period. The following rules shall apply to the
7 annualized net metering calculation:

8 (1) The eligible residential or small commercial
9 customer-generator shall, at the end of each 12-month period
10 following the date of final interconnection of the eligible
11 customer-generator's system with an electricity distribution utility
12 or cooperative, and at each anniversary date thereafter, be billed
13 for electricity used during that 12-month period. The electricity
14 distribution utility or cooperative shall determine if the eligible
15 residential or small commercial customer-generator was a net
16 consumer or a net producer of electricity during that period.

17 (2) At the end of each 12-month period, where the electricity
18 supplied during the period by the electricity distribution utility or
19 cooperative exceeds the electricity generated by the eligible
20 residential or small commercial customer-generator during that
21 same period, the eligible residential or small commercial
22 customer-generator is a net electricity consumer and the electricity
23 distribution utility or cooperative shall be owed compensation for
24 the eligible customer-generator's net kilowatthour consumption
25 over that 12-month period. The compensation owed for the eligible
26 residential or small commercial customer-generator's consumption
27 shall be calculated as follows:

28 (A) For all eligible customer-generators taking service under
29 contracts or tariffs employing "baseline" and "over baseline" rates
30 or charges, any net monthly consumption of electricity shall be
31 calculated according to the terms of the contract or tariff to which
32 the same customer would be assigned to, or be eligible for, if the
33 customer was not an eligible customer-generator. If those same
34 customer-generators are net generators over a billing period, the
35 net kilowatthours generated shall be valued at the same price per
36 kilowatthour as the electricity distribution utility or cooperative
37 would charge for the baseline quantity of electricity during that
38 billing period, and if the number of kilowatthours generated
39 exceeds the baseline quantity, the excess shall be valued at the
40 same price per kilowatthour as the electricity distribution utility

1 or cooperative would charge for electricity over the baseline
2 quantity during that billing period.

3 (B) For all eligible customer-generators taking service under
4 contracts or tariffs employing “time-of-use” rates or charges, any
5 net monthly consumption of electricity shall be calculated
6 according to the terms of the contract or tariff to which the same
7 customer would be assigned to, or be eligible for, if the customer
8 was not an eligible customer-generator. When those same
9 customer-generators are net generators during any discrete
10 time-of-use period, the net kilowatthours produced shall be valued
11 at the same price per kilowatthour as the electricity distribution
12 utility or cooperative would charge for retail kilowatthour sales
13 during that same “time-of-use” period. If the eligible
14 customer-generator’s “time-of-use” electrical meter is unable to
15 measure the flow of electricity in two directions, paragraph (1) of
16 subdivision (c) shall apply.

17 (C) For all eligible residential and small commercial
18 customer-generators and for each billing period, the net balance
19 of moneys owed to the electricity distribution utility or cooperative
20 for net consumption of electricity or credits owed to the eligible
21 customer-generator for net generation of electricity shall be carried
22 forward as a monetary value until the end of each 12-month period.
23 For all eligible commercial, industrial, and agricultural
24 customer-generators, the net balance of moneys owed shall be paid
25 in accordance with the electricity distribution utility or
26 cooperative’s normal billing cycle, except that if the eligible
27 commercial, industrial, or agricultural customer-generator is a net
28 electricity producer over a normal billing cycle, any excess
29 kilowatthours generated during the billing cycle shall be carried
30 over to the following billing period as a monetary value, calculated
31 according to the procedures set forth in this section, and appear as
32 a credit on the eligible customer-generator’s account, until the end
33 of the annual period when paragraph (3) shall apply.

34 (3) At the end of each 12-month period, where the electricity
35 generated by the eligible customer-generator during the 12-month
36 period exceeds the electricity supplied by the electricity distribution
37 utility or cooperative during that same period, the eligible
38 customer-generator is a net electricity producer and the electricity
39 distribution utility or cooperative shall retain any excess
40 kilowatthours generated during the prior 12-month period. The

1 eligible customer-generator shall not be owed any compensation
2 for those excess kilowatthours unless the electricity distribution
3 utility or cooperative enters into a purchase agreement with the
4 eligible customer-generator for those excess kilowatthours.

5 (4) The electricity distribution utility or cooperative shall provide
6 every eligible residential or small commercial customer-generator
7 with net electricity consumption information with each regular
8 bill. That information shall include the current monetary balance
9 owed the electricity distribution utility or cooperative for net
10 electricity consumed, or the current amount of excess electricity
11 produced, since the last 12-month period ended. Notwithstanding
12 this subdivision, an electricity distribution utility or cooperative
13 shall permit that customer to pay monthly for net energy consumed.

14 (5) If an eligible residential or small commercial
15 customer-generator terminates the customer relationship with the
16 electricity distribution utility or cooperative, the electricity
17 distribution utility or cooperative shall reconcile the eligible
18 customer-generator's consumption and production of electricity
19 during any part of a 12-month period following the last
20 reconciliation, according to the requirements set forth in this
21 subdivision, except that those requirements shall apply only to the
22 months since the most recent 12-month bill.

23 (6) If an electric service provider or electricity distribution utility
24 or cooperative providing net energy metering to a residential or
25 small commercial customer-generator ceases providing that electric
26 service to that customer during any 12-month period, and the
27 customer-generator enters into a new net energy metering contract
28 or tariff with a new electric service provider or electricity
29 distribution utility or cooperative, the 12-month period, with respect
30 to that new electric service provider or electricity distribution utility
31 or cooperative, shall commence on the date on which the new
32 electric service provider or electricity distribution utility or
33 cooperative first supplies electric service to the customer-generator.

34 (i) Notwithstanding any other provisions of this section, the
35 following provisions shall apply to an eligible customer-generator
36 with a capacity of more than 10 kilowatts, but not exceeding one
37 megawatt, that receives electric service from a local publicly owned
38 electric utility that has elected to utilize a co-energy metering
39 program unless the local publicly owned electric utility chooses
40 to provide service for eligible customer-generators with a capacity

1 of more than 10 kilowatts in accordance with subdivisions (g) and
2 (h):

3 (1) The eligible customer-generator shall be required to utilize
4 a meter, or multiple meters, capable of separately measuring
5 electricity flow in both directions. All meters shall provide
6 “time-of-use” measurements of electricity flow, and the customer
7 shall take service on a time-of-use rate schedule. If the existing
8 meter of the eligible customer-generator is not a time-of-use meter
9 or is not capable of measuring total flow of energy in both
10 directions, the eligible customer-generator shall be responsible for
11 all expenses involved in purchasing and installing a meter that is
12 both time-of-use and able to measure total electricity flow in both
13 directions. This subdivision shall not restrict the ability of an
14 eligible customer-generator to utilize any economic incentives
15 provided by a governmental agency or an electricity distribution
16 utility or cooperative to reduce its costs for purchasing and
17 installing a time-of-use meter.

18 (2) The consumption of electricity from the local publicly owned
19 electric utility shall result in a cost to the eligible
20 customer-generator to be priced in accordance with the standard
21 rate charged to the eligible customer-generator in accordance with
22 the rate structure to which the customer would be assigned if the
23 customer did not use an eligible solar or wind electrical generating
24 facility. The generation of electricity provided to the local publicly
25 owned electric utility shall result in a credit to the eligible
26 customer-generator and shall be priced in accordance with the
27 generation component, established under the applicable structure
28 to which the customer would be assigned if the customer did not
29 use an eligible solar or wind electrical generating facility.

30 (3) All costs and credits shall be shown on the eligible
31 customer-generator’s bill for each billing period. In any months
32 in which the eligible customer-generator has been a net consumer
33 of electricity calculated on the basis of value determined pursuant
34 to paragraph (2), the customer-generator shall owe to the local
35 publicly owned electric utility the balance of electricity costs and
36 credits during that billing period. In any billing period in which
37 the eligible customer-generator has been a net producer of
38 electricity calculated on the basis of value determined pursuant to
39 paragraph (2), the local publicly owned electric utility shall owe
40 to the eligible customer-generator the balance of electricity costs

and credits during that billing period. Any net credit to the eligible customer-generator of electricity costs may be carried forward to subsequent billing periods, provided that a local publicly owned electric utility may choose to carry the credit over as a kilowatthour credit consistent with the provisions of any applicable contract or tariff, including any differences attributable to the time of generation of the electricity. At the end of each 12-month period, the local publicly owned electric utility may reduce any net credit due to the eligible customer-generator to zero.

(j) (1) A solar or wind turbine electrical generating system, or a hybrid system of both, used by an eligible customer-generator shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories, including Underwriters Laboratories and, where applicable, rules of the commission regarding safety and reliability. A customer-generator whose solar or wind turbine electrical generating system, or a hybrid system of both, meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.

(2) *On and after July 1, 2010, a contractor holding a class C-46 license issued by the Contractors' State License Board shall not construct, alter, or install, for an eligible customer-generator generating electricity under a tariff or contract pursuant to this section, a solar photovoltaic electrical generating facility with the capacity to generate greater than 250 kilowatts of electricity. Contractors holding class C-46 licenses as of January 1, 2010, shall be deemed qualified to take the class C-10 license examination.*

(k) If the commission determines that there are cost or revenue obligations for an electric corporation, as defined in Section 218, that may not be recovered from customer-generators acting pursuant to this section, those obligations shall remain within the customer class from which any shortfall occurred and may not be shifted to any other customer class. Net energy metering and co-energy metering customers shall not be exempt from the public goods charges imposed pursuant to Article 7 (commencing with Section 381), Article 8 (commencing with Section 385), or Article 15 (commencing with Section 399) of Chapter 2.3 of Part 1. In its

1 report to the Legislature, the commission shall examine different
2 methods to ensure that the public goods charges remain
3 nonbypassable.

4 (l) A net energy metering, co-energy metering, or wind energy
5 co-metering customer shall reimburse the Department of Water
6 Resources for all charges that would otherwise be imposed on the
7 customer by the commission to recover bond-related costs pursuant
8 to an agreement between the commission and the Department of
9 Water Resources pursuant to Section 80110 of the Water Code,
10 as well as the costs of the department equal to the share of the
11 department's estimated net unavoidable power purchase contract
12 costs attributable to the customer. The commission shall
13 incorporate the determination into an existing proceeding before
14 the commission, and shall ensure that the charges are
15 nonbypassable. Until the commission has made a determination
16 regarding the nonbypassable charges, net energy metering,
17 co-energy metering, and wind energy co-metering shall continue
18 under the same rules, procedures, terms, and conditions as were
19 applicable on December 31, 2002.

20 (m) In implementing the requirements of subdivisions (k) and
21 (l), a customer-generator shall not be required to replace its existing
22 meter except as set forth in paragraph (1) of subdivision (c), nor
23 shall the electricity distribution utility or cooperative require
24 additional measurement of usage beyond that which is necessary
25 for customers in the same rate class as the eligible
26 customer-generator.

27 (n) It is the intent of the Legislature that the Treasurer
28 incorporate net energy metering, co-energy metering, and wind
29 energy co-metering projects undertaken pursuant to this section
30 as sustainable building methods or distributive energy technologies
31 for purposes of evaluating low-income housing projects.

32 *SEC. 2. Section 2827 of the Public Utilities Code is amended*
33 *to read:*

34 2827. (a) The Legislature finds and declares that a program
35 to provide net energy metering, co-energy metering, and wind
36 energy co-metering for eligible customer-generators is one way
37 to encourage substantial private investment in renewable energy
38 resources, stimulate in-state economic growth, reduce demand for
39 electricity during peak consumption periods, help stabilize
40 California's energy supply infrastructure, enhance the continued

diversification of California's energy resource mix, and reduce interconnection and administrative costs for electricity suppliers.

(b) As used in this section, the following terms have the following meanings:

(1) "Co-energy metering" means a program that is the same in all other respects as a net energy metering program, except that the local publicly owned electric utility has elected to apply a generation-to-generation energy and time-of-use credit formula as provided in subdivision (i).

(2) "Electrical cooperative" means an electrical cooperative as defined in Section 2776.

(3) ~~"Electric"~~ "Electricity distribution utility or cooperative" means an electrical corporation, a local publicly owned electric utility, or an electrical cooperative, or any other entity, except an electric service provider, that offers electrical service. This section shall not apply to a local publicly owned electric utility that serves more than 750,000 customers and that also conveys water to its customers.

(4) "Eligible customer-generator" means a residential, small commercial customer as defined in subdivision (h) of Section 331, commercial, industrial, or agricultural customer of an electricity distribution utility or cooperative, who uses a solar or a wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than one megawatt that is located on the customer's owned, leased, or rented premises, is interconnected and operates in parallel with the electric grid, and is intended primarily to offset part or all of the customer's own electrical requirements.

(5) "Net energy metering" means measuring the difference between the electricity supplied through the electric grid and the electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period as described in subdivision (h). An eligible customer-generator who already owns an existing solar or wind turbine electrical generating facility, or a hybrid system of both, is eligible to receive net energy metering service in accordance with this section.

(6) "*Net surplus customer-generator*" means an eligible customer-generator that, during a 12-month period, generates more electricity than is supplied by the electricity distribution

1 utility or cooperative to the eligible customer-generator during
2 the same 12-month period.

3 (7) “Net surplus electricity” means all electricity generated by
4 an eligible customer-generator measured in kilowatthours over a
5 12-month period that exceeds the amount of electricity consumed
6 by that eligible customer-generator.

7 ~~(6)~~

8 (8) “Ratemaking authority” means, for an electrical corporation,
9 electrical cooperative, or electric service provider, the commission,
10 and for a local publicly owned electric utility, the local elected
11 body responsible for setting the rates of the local publicly owned
12 utility.

13 ~~(7)~~

14 (9) “Wind energy co-metering” means any wind energy project
15 greater than 50 kilowatts, but not exceeding one megawatt, where
16 the difference between the electricity supplied through the electric
17 grid and the electricity generated by an eligible customer-generator
18 and fed back to the electric grid over a 12-month period is as
19 described in subdivision (h). Wind energy co-metering shall be
20 accomplished pursuant to Section 2827.8.

21 (c) (1) Every electricity distribution utility or cooperative shall
22 develop a standard contract or tariff providing for net energy
23 metering, and shall make this standard contract or tariff available
24 to eligible customer-generators, upon request, on a
25 first-come-first-served basis until the time that the total rated
26 generating capacity used by eligible customer-generators exceeds
27 ~~2.5~~ 5 percent of the electricity distribution utility or cooperative’s
28 aggregate customer peak demand. Net energy metering shall be
29 accomplished using a single meter capable of registering the flow
30 of electricity in two directions. An additional meter or meters to
31 monitor the flow of electricity in each direction may be installed
32 with the consent of the customer-generator, at the expense of the
33 electricity distribution utility or cooperative, and the additional
34 metering shall be used only to provide the information necessary
35 to accurately bill or credit the customer-generator pursuant to
36 subdivision (h), or to collect solar or wind electric generating
37 system performance information for research purposes. If the
38 existing electrical meter of an eligible customer-generator is not
39 capable of measuring the flow of electricity in two directions, the
40 customer-generator shall be responsible for all expenses involved

1 in purchasing and installing a meter that is able to measure
2 electricity flow in two directions. If an additional meter or meters
3 are installed, the net energy metering calculation shall yield a result
4 identical to that of a single meter.

5 (2) (A) On an annual basis, beginning in 2003, every electricity
6 distribution utility or cooperative shall make available to the
7 ratemaking authority information on the total rated generating
8 capacity used by eligible customer-generators that are customers
9 of that provider in the provider's service area.

10 (B) An electric service provider operating pursuant to Section
11 394 shall make available to the ratemaking authority the
12 information required by this paragraph for each eligible
13 customer-generator that is their customer for each service area of
14 an electric corporation, local publicly owned electric utility, or
15 electrical cooperative, in which the ~~customer~~ *eligible*
16 *customer-generator* has net energy metering.

17 (C) The ratemaking authority shall develop a process for making
18 the information required by this paragraph available to electricity
19 distribution utilities and cooperatives, and for using that
20 information to determine when, pursuant to paragraphs (1) and
21 (3), an electricity distribution utility or cooperative is not obligated
22 to provide net energy metering to additional customer-generators
23 in its service area.

24 (3) An electricity distribution utility or cooperative is not
25 obligated to provide net energy metering to additional *eligible*
26 customer-generators in its service area when the combined total
27 peak demand of all *electricity used by eligible* customer-generators
28 served by all the electricity distribution utilities or cooperatives in
29 that service area furnishing net energy metering to eligible
30 customer-generators exceeds ~~2.5~~ 5 percent of the aggregate
31 customer peak demand of those electricity distribution utilities or
32 cooperatives.

33 (4) By January 1, 2010, the commission, in consultation with
34 the Energy Commission, shall submit a report to the Governor and
35 the Legislature on the costs and benefits of net energy metering,
36 wind energy co-metering, and co-energy metering to participating
37 customers and nonparticipating customers and with options to
38 replace the economic costs and benefits of net energy metering,
39 wind energy co-metering, and co-energy metering with a
40 mechanism that more equitably balances the interests of

1 participating and nonparticipating customers, and that incorporates
2 the findings of the report on economic and environmental costs
3 and benefits of net metering required by subdivision (n).

4 (d) Every electricity distribution utility or cooperative shall
5 make all necessary forms and contracts for net energy metering
6 service available for download from the Internet.

7 (e) (1) Every electricity distribution utility or cooperative shall
8 ensure that requests for establishment of net energy metering are
9 processed in a time period not exceeding that for similarly situated
10 customers requesting new electric service, but not to exceed 30
11 working days from the date it receives a completed application
12 form for net energy metering service, including a signed
13 interconnection agreement from an eligible customer-generator
14 and the electric inspection clearance from the governmental
15 authority having jurisdiction.

16 (2) Every electricity distribution utility or cooperative shall
17 ensure that requests for an interconnection agreement from an
18 eligible customer-generator are processed in a time period not to
19 exceed 30 working days from the date it receives a completed
20 application form from the eligible customer-generator for an
21 interconnection agreement.

22 (3) If an electricity distribution utility or cooperative is unable
23 to process a request within the allowable timeframe pursuant to
24 paragraph (1) or (2), it shall notify the eligible customer-generator
25 and the ratemaking authority of the reason for its inability to
26 process the request and the expected completion date.

27 (f) (1) If a customer participates in direct transactions pursuant
28 to paragraph (1) of subdivision (b) of Section 365 with an electric
29 service provider that does not provide distribution service for the
30 direct transactions, the electricity distribution utility or cooperative
31 that provides distribution service for an eligible customer-generator
32 is not obligated to provide net energy metering to the customer.

33 (2) If a customer participates in direct transactions pursuant to
34 paragraph (1) of subdivision (b) of Section 365 with an electric
35 service provider, and the customer is an eligible
36 customer-generator, the electricity distribution utility or cooperative
37 that provides distribution service for the direct transactions may
38 recover from the customer's electric service provider the
39 incremental costs of metering and billing service related to net
40 energy metering in an amount set by the ratemaking authority.

(g) Except for the time-variant kilowatthour pricing portion of any tariff adopted by the commission pursuant to paragraph (4) of subdivision (a) of Section 2851, each net energy metering contract or tariff shall be identical, with respect to rate structure, all retail rate components, and any monthly charges, to the contract or tariff to which the same customer would be assigned if the customer did not use an eligible solar or wind electrical generating facility, except that eligible customer-generators shall not be assessed standby charges on the electrical generating capacity or the kilowatthour production of an eligible solar or wind electrical generating facility. The charges for all retail rate components for eligible customer-generators shall be based exclusively on the customer-generator's net kilowatthour consumption over a 12-month period, without regard to the customer-generator's choice as to whom it purchases electricity that is not self-generated. Any new or additional demand charge, standby charge, customer charge, minimum monthly charge, interconnection charge, or any other charge that would increase an eligible customer-generator's costs beyond those of other customers who are not eligible customer-generators in the rate class to which the eligible customer-generator would otherwise be assigned if the customer did not own, lease, rent, or otherwise operate an eligible solar or wind electrical generating facility ~~are~~ *is* contrary to the intent of this section, and shall not form a part of net energy metering contracts or tariffs.

(h) For eligible residential and small commercial customer-generators, the net energy metering calculation shall be made by measuring the difference between the electricity supplied to the eligible customer-generator and the electricity generated by the eligible customer-generator and fed back to the electric grid over a 12-month period. The following rules shall apply to the annualized net metering calculation:

(1) The eligible residential or small commercial customer-generator shall, at the end of each 12-month period following the date of final interconnection of the eligible customer-generator's system with an electricity distribution utility or cooperative, and at each anniversary date thereafter, be billed for electricity used during that 12-month period. The electricity distribution utility or cooperative shall determine if the eligible residential or small commercial customer-generator was a net

1 consumer or a net producer of electricity~~electricity used by eligible~~
2 *surplus customer-generator* during that period.

3 (2) At the end of each 12-month period, where the electricity
4 supplied during the period by the electricity distribution utility or
5 cooperative exceeds the electricity generated by the eligible
6 residential or small commercial customer-generator during that
7 same period, the eligible residential or small commercial
8 customer-generator is a net electricity consumer and the electricity
9 distribution utility or cooperative shall be owed compensation for
10 the eligible customer-generator's net kilowatthour consumption
11 over that 12-month period. The compensation owed for the eligible
12 residential or small commercial customer-generator's consumption
13 shall be calculated as follows:

14 (A) For all eligible customer-generators taking service under
15 contracts or tariffs employing "baseline" and "over baseline" rates
16 or charges, any net monthly consumption of electricity shall be
17 calculated according to the terms of the contract or tariff to which
18 the same customer would be assigned to, or be eligible for, if the
19 customer was not an eligible customer-generator. If those same
20 customer-generators are net generators over a billing period, the
21 net kilowatthours generated shall be valued at the same price per
22 kilowatthour as the electricity distribution utility or cooperative
23 would charge for the baseline quantity of electricity during that
24 billing period, and if the number of kilowatthours generated
25 exceeds the baseline quantity, the excess shall be valued at the
26 same price per kilowatthour as the electricity distribution utility
27 or cooperative would charge for electricity over the baseline
28 quantity during that billing period.

29 (B) For all eligible customer-generators taking service under
30 contracts or tariffs employing "time-of-use" rates or charges, any
31 net monthly consumption of electricity shall be calculated
32 according to the terms of the contract or tariff to which the same
33 customer would be assigned to, or be eligible for, if the customer
34 was not an eligible customer-generator. When those same
35 customer-generators are net generators during any discrete
36 time-of-use period, the net kilowatthours produced shall be valued
37 at the same price per kilowatthour as the electricity distribution
38 utility or cooperative would charge for retail kilowatthour sales
39 during that same "time-of-use" period. If the eligible
40 customer-generator's "time-of-use" electrical meter is unable to

1 measure the flow of electricity in two directions, ~~subparagraph~~
2 ~~(A) of paragraph (1) of subdivision (c) shall apply.~~

3 (C) For all eligible residential and small commercial
4 customer-generators and for each billing period, the net balance
5 of moneys owed to the electricity distribution utility or cooperative
6 for net consumption of electricity or credits owed to the eligible
7 customer-generator for net generation of electricity shall be carried
8 forward as a monetary value until the end of each 12-month period.
9 For all eligible commercial, industrial, and agricultural
10 customer-generators, the net balance of moneys owed shall be paid
11 in accordance with the electricity distribution utility or
12 cooperative's normal billing cycle, except that if the eligible
13 commercial, industrial, or agricultural customer-generator is a net
14 electricity producer over a normal billing cycle, any excess
15 kilowatthours generated during the billing cycle shall be carried
16 over to the following billing period as a monetary value, calculated
17 according to the procedures set forth in this section, and appear as
18 a credit on the eligible customer-generator's account, until the end
19 of the annual period when paragraph (3) shall apply.

20 (3) At the end of each 12-month period, where the electricity
21 generated by the eligible customer-generator during the 12-month
22 period exceeds the electricity supplied by the electricity distribution
23 utility or cooperative during that same period, the eligible
24 customer-generator is a net ~~electricity producer surplus~~
25 *customer-generator* and the electricity distribution utility or
26 cooperative shall ~~retain any excess kilowatthours generated during~~
27 ~~the prior 12-month period. The eligible customer-generator shall~~
28 ~~not be owed any compensation for those excess kilowatthours~~
29 ~~unless the electricity distribution utility or cooperative enters into~~
30 ~~a purchase agreement with the eligible customer-generator for~~
31 ~~those excess kilowatthours allow the eligible customer-generator~~
32 *to apply the net surplus electricity as a credit for kilowatthours*
33 *consumed during one, or both, of the two following 12-month*
34 *periods.*

35 (4) The electricity distribution utility or cooperative shall provide
36 every eligible residential or small commercial customer-generator
37 with net electricity consumption *and net surplus electricity*
38 *generation* information with each regular bill. That information
39 shall include the current monetary balance owed the electricity
40 distribution utility or cooperative for net electricity consumed, or

1 ~~the current amount of excess electricity produced~~ *net surplus*
2 *electricity generated*, since the last 12-month period ended.
3 Notwithstanding this subdivision, an electricity distribution utility
4 or cooperative shall permit that customer to pay monthly for net
5 energy consumed.

6 (5) If an eligible residential or small commercial
7 customer-generator terminates the customer relationship with the
8 electricity distribution utility or cooperative, the electricity
9 distribution utility or cooperative shall reconcile the eligible
10 customer-generator's consumption and production of electricity
11 during any part of a 12-month period following the last
12 reconciliation, according to the requirements set forth in this
13 subdivision, except that those requirements shall apply only to the
14 months since the most recent 12-month bill.

15 (6) If an electric service provider or electricity distribution utility
16 or cooperative providing net energy metering to a residential or
17 small commercial customer-generator ceases providing that electric
18 service to that customer during any 12-month period, and the
19 customer-generator enters into a new net energy metering contract
20 or tariff with a new electric service provider or electricity
21 distribution utility or cooperative, the 12-month period, with respect
22 to that new electric service provider or electricity distribution utility
23 or cooperative, shall commence on the date on which the new
24 electric service provider or electricity distribution utility or
25 cooperative first supplies electric service to the customer-generator.

26 (i) Notwithstanding any other provisions of this section, the
27 following provisions shall apply to an eligible customer-generator
28 with a capacity of more than 10 kilowatts, but not exceeding one
29 megawatt, that receives electric service from a local publicly owned
30 electric utility that has elected to utilize a co-energy metering
31 program unless the local publicly owned electric utility chooses
32 to provide service for eligible customer-generators with a capacity
33 of more than 10 kilowatts in accordance with subdivisions (g) and
34 (h):

35 (1) The eligible customer-generator shall be required to utilize
36 a meter, or multiple meters, capable of separately measuring
37 electricity flow in both directions. All meters shall provide
38 "time-of-use" measurements of electricity flow, and the customer
39 shall take service on a time-of-use rate schedule. If the existing
40 meter of the eligible customer-generator is not a time-of-use meter

1 or is not capable of measuring total flow of energy in both
2 directions, the eligible customer-generator shall be responsible for
3 all expenses involved in purchasing and installing a meter that is
4 both time-of-use and able to measure total electricity flow in both
5 directions. This subdivision shall not restrict the ability of an
6 eligible customer-generator to utilize any economic incentives
7 provided by a ~~government~~ *governmental* agency or an electricity
8 distribution utility or cooperative to reduce its costs for purchasing
9 and installing a time-of-use meter.

10 (2) The consumption of electricity from the local publicly owned
11 electric utility shall result in a cost to the eligible
12 customer-generator to be priced in accordance with the standard
13 rate charged to the eligible customer-generator in accordance with
14 the rate structure to which the customer would be assigned if the
15 customer did not use an eligible solar or wind electrical generating
16 facility. The generation of electricity provided to the local publicly
17 owned electric utility shall result in a credit to the eligible
18 customer-generator and shall be priced in accordance with the
19 generation component, established under the applicable structure
20 to which the customer would be assigned if the customer did not
21 use an eligible solar or wind electrical generating facility.

22 (3) All costs and credits shall be shown on the eligible
23 customer-generator's bill for each billing period. In any months
24 in which the eligible customer-generator has been a net consumer
25 of electricity calculated on the basis of value determined pursuant
26 to paragraph (2), the customer-generator shall owe to the local
27 publicly owned electric utility the balance of electricity costs and
28 credits during that billing period. In any billing period in which
29 the eligible customer-generator has been a net producer of
30 electricity calculated on the basis of value determined pursuant to
31 paragraph (2), the local publicly owned electric utility shall owe
32 to the eligible customer-generator the balance of electricity costs
33 and credits during that billing period. Any net credit to the eligible
34 customer-generator of electricity costs may be carried forward to
35 subsequent billing periods, provided that a local publicly owned
36 electric utility may choose to carry the credit over as a kilowatthour
37 credit consistent with the provisions of any applicable contract or
38 tariff, including any differences attributable to the time of
39 generation of the electricity. At the end of each 12-month period,

1 the local publicly owned electric utility may reduce any net credit
2 due to the eligible customer-generator to zero.

3 (j) (I) A solar or wind turbine electrical generating system, or
4 a hybrid system of both, used by an eligible customer-generator
5 shall meet all applicable safety and performance standards
6 established by the National Electrical Code, the Institute of
7 Electrical and Electronics Engineers, and accredited testing
8 laboratories, including Underwriters Laboratories and, where
9 applicable, rules of the commission regarding safety and reliability.
10 A customer-generator whose solar or wind turbine electrical
11 generating system, or a hybrid system of both, meets those
12 standards and rules shall not be required to install additional
13 controls, perform or pay for additional tests, or purchase additional
14 liability insurance.

15 (2) *On and after July 1, 2010, a contractor holding a class C-46*
16 *license issued by the Contractors' State License Board shall not*
17 *construct, alter, or install, for an eligible customer-generator*
18 *generating electricity under a tariff or contract pursuant to this*
19 *section, a solar photovoltaic electrical generating facility with the*
20 *capacity to generate greater than 250 kilowatts of electricity.*
21 *Contractors holding class C-46 licenses as of January 1, 2010,*
22 *shall be deemed qualified to take the class C-10 license*
23 *examination.*

24 (k) If the commission determines that there are cost or revenue
25 obligations for an electric corporation, as defined in Section 218,
26 that may not be recovered from customer-generators acting
27 pursuant to this section, those obligations shall remain within the
28 customer class from which any shortfall occurred and may not be
29 shifted to any other customer class. Net energy metering and
30 co-energy metering customers shall not be exempt from the public
31 goods charges imposed pursuant to Article 7 (commencing with
32 Section 381), Article 8 (commencing with Section 385), or Article
33 15 (commencing with Section 399) of Chapter 2.3 of Part 1. In its
34 report to the Legislature, the commission shall examine different
35 methods to ensure that the public goods charges remain
36 nonbypassable.

37 (l) A net energy metering, co-energy metering, or wind energy
38 co-metering customer shall reimburse the Department of Water
39 Resources for all charges that would otherwise be imposed on the
40 customer by the commission to recover bond-related costs pursuant

1 to an agreement between the commission and the Department of
2 Water Resources pursuant to Section 80110 of the Water Code,
3 as well as the costs of the department equal to the share of the
4 department's estimated net unavoidable power purchase contract
5 costs attributable to the customer. The commission shall
6 incorporate the determination into an existing proceeding before
7 the commission, and shall ensure that the charges are
8 nonbypassable. Until the commission has made a determination
9 regarding the nonbypassable charges, net energy metering,
10 co-energy metering, and wind energy co-metering shall continue
11 under the same rules, procedures, terms, and conditions as were
12 applicable on December 31, 2002.

13 (m) In implementing the requirements of subdivisions (k) and
14 (l), a customer-generator shall not be required to replace its existing
15 meter except as set forth in ~~subparagraph (A) of paragraph (1) of~~
16 subdivision (c), nor shall the electricity distribution utility or
17 cooperative require additional measurement of usage beyond that
18 which is necessary for customers in the same rate class as the
19 eligible customer-generator.

20 (n) It is the intent of the Legislature that the Treasurer
21 incorporate net energy metering, co-energy metering, and wind
22 energy co-metering projects undertaken pursuant to this section
23 as sustainable building methods or distributive energy technologies
24 for purposes of evaluating low-income housing projects.

25 *SEC. 3. Section 2827 of the Public Utilities Code is amended*
26 *to read:*

27 2827. (a) The Legislature finds and declares that a program
28 to provide net energy metering *combined with net surplus*
29 *compensation*, co-energy metering, and wind energy co-metering
30 for eligible customer-generators is one way to encourage substantial
31 private investment in renewable energy resources, stimulate in-state
32 economic growth, reduce demand for electricity during peak
33 consumption periods, help stabilize California's energy supply
34 infrastructure, enhance the continued diversification of California's
35 energy resource mix, ~~and~~ reduce interconnection and administrative
36 costs for electricity suppliers, *and encourage conservation and*
37 *efficiency.*

38 (b) As used in this section, the following terms have the
39 following meanings:

1 (1) “Co-energy metering” means a program that is the same in
2 all other respects as a net energy metering program, except that
3 the local publicly owned electric utility has elected to apply a
4 generation-to-generation energy and time-of-use credit formula
5 as provided in subdivision (i).

6 (2) “Electrical cooperative” means an electrical cooperative as
7 defined in Section 2776.

8 (3) ~~“Electric distribution utility or cooperative utility”~~ means
9 an electrical corporation, a local publicly owned electric utility,
10 or an electrical cooperative, or any other entity, except an electric
11 service provider, that offers electrical service. This section shall
12 not apply to a local publicly owned electric utility that serves more
13 than 750,000 customers and that also conveys water to its
14 customers.

15 (4) “Eligible customer-generator” means a residential, small
16 commercial customer as defined in subdivision (h) of Section 331,
17 commercial, industrial, or agricultural customer of an ~~electricity~~
18 ~~distribution utility or cooperative~~ *electric utility*, who uses a solar
19 or a wind turbine electrical generating facility, or a hybrid system
20 of both, with a capacity of not more than one megawatt that is
21 located on the customer’s owned, leased, or rented premises, is
22 interconnected and operates in parallel with the electric grid, and
23 is intended primarily to offset part or all of the customer’s own
24 electrical requirements.

25 (5) “Net energy metering” means measuring the difference
26 between the electricity supplied through the electric grid and the
27 electricity generated by an eligible customer-generator and fed
28 back to the electric grid over a 12-month period as described in
29 subdivision (h). ~~An eligible customer-generator who already owns~~
30 ~~an existing solar or wind turbine electrical generating facility, or~~
31 ~~a hybrid system of both, is eligible to receive net energy metering~~
32 ~~service in accordance with this section subdivisions (c) and (h).~~

33 (6) *“Net surplus customer-generator” means an eligible*
34 *customer-generator that generates more electricity during a*
35 *12-month period than is supplied by the electric utility to the*
36 *eligible customer-generator during the same 12-month period.*

37 (7) *“Net surplus electricity” means all electricity generated by*
38 *an eligible customer-generator measured in kilowatthours over a*
39 *12-month period that exceeds the amount of electricity consumed*
40 *by that eligible customer-generator.*

1 (8) “*Net surplus electricity compensation*” means a per
2 kilowatthour rate offered by the electric utility to the net surplus
3 customer-generator for net surplus electricity that is set by the
4 ratemaking authority pursuant to subdivision (h).

5 (6)

6 (9) “*Ratemaking authority*” means, for an electrical corporation;
7 or electrical cooperative, ~~or electric service provider~~, the
8 commission, and for a local publicly owned electric utility, the
9 local elected body responsible for setting the rates of the local
10 publicly owned utility.

11 (7)

12 (10) “*Wind energy co-metering*” means any wind energy project
13 greater than 50 kilowatts, but not exceeding one megawatt, where
14 the difference between the electricity supplied through the electric
15 grid and the electricity generated by an eligible customer-generator
16 and fed back to the electric grid over a 12-month period is as
17 described in subdivision (h). Wind energy co-metering shall be
18 accomplished pursuant to Section 2827.8.

19 (c) (1) Every ~~electricity distribution utility or cooperative~~
20 *electric utility* shall develop a standard contract or tariff providing
21 for net energy metering, and shall make this standard contract or
22 tariff available to eligible customer-generators, upon request, on
23 a first-come-first-served basis until the time that the total rated
24 generating capacity used by eligible customer-generators exceeds
25 ~~2.5~~ 5 percent of the ~~electricity distribution utility or cooperative’s~~
26 *electric utility’s* aggregate customer peak demand. Net energy
27 metering shall be accomplished using a single meter capable of
28 registering the flow of electricity in two directions. An additional
29 meter or meters to monitor the flow of electricity in each direction
30 may be installed with the consent of the *eligible*
31 customer-generator, at the expense of the ~~electricity distribution~~
32 ~~utility or cooperative~~ *electric utility*, and the additional metering
33 shall be used only to provide the information necessary to
34 accurately bill or credit the *eligible* customer-generator pursuant
35 to subdivision (h), or to collect solar or wind electric generating
36 system performance information for research purposes. If the
37 existing electrical meter of an eligible customer-generator is not
38 capable of measuring the flow of electricity in two directions, the
39 *eligible* customer-generator shall be responsible for all expenses
40 involved in purchasing and installing a meter that is able to measure

1 electricity flow in two directions. If an additional meter or meters
2 are installed, the net energy metering calculation shall yield a result
3 identical to that of a single meter. *An eligible customer-generator*
4 *that is receiving service other than through the standard contract*
5 *or tariff may elect to receive service through the standard contract*
6 *or tariff until the electric utility reaches the generation limit set*
7 *forth in this paragraph. Once the generation limit is reached, only*
8 *eligible customer-generators that had previously elected to receive*
9 *service pursuant to the standard contract or tariff have a right to*
10 *continue to receive service pursuant to the standard contract or*
11 *tariff. Eligibility for net energy metering does not limit an eligible*
12 *customer-generator's eligibility for any other rebate, incentive,*
13 *or credit provided by the electric utility, or pursuant to any*
14 *governmental program, including rebates and incentives provided*
15 *pursuant to the California Solar Initiative.*

16 (2) (A) On an annual basis, beginning in 2003, every ~~electricity~~
17 ~~distribution utility or cooperative~~ *electric utility* shall make
18 available to the ratemaking authority information on the total rated
19 generating capacity used by eligible customer-generators that are
20 customers of that provider in the provider's service area *and the*
21 *net surplus electricity purchased by the electric utility pursuant*
22 *to this section.*

23 (B) An electric service provider operating pursuant to Section
24 394 shall make available to the ratemaking authority the
25 information required by this paragraph for each eligible
26 customer-generator that is their customer for each service area of
27 an electric corporation, local publicly owned electric utility, or
28 electrical cooperative, in which the ~~customer~~ *eligible*
29 *customer-generator* has net energy metering.

30 (C) The ratemaking authority shall develop a process for making
31 the information required by this paragraph available to ~~electricity~~
32 ~~distribution utilities and cooperatives~~ *electric utilities*, and for
33 using that information to determine when, pursuant to paragraphs
34 (1) and (3), an ~~electricity distribution utility or cooperative~~ *electric*
35 *utility* is not obligated to provide net energy metering to additional
36 *eligible* customer-generators in its service area.

37 (3) An ~~electricity distribution utility or cooperative~~ *electric*
38 *utility* is not obligated to provide net energy metering to additional
39 *eligible* customer-generators in its service area when the combined
40 total peak demand of all *electricity used by eligible*

1 customer-generators served by all the ~~electricity distribution~~
2 ~~utilities or cooperatives~~ *electric utilities* in that service area
3 furnishing net energy metering to eligible customer-generators
4 exceeds ~~2.5~~ 5 percent of the aggregate customer peak demand of
5 those ~~electricity distribution utilities or cooperatives~~ *electric*
6 *utilities*.

7 (4) By January 1, 2010, the commission, in consultation with
8 the Energy Commission, shall submit a report to the Governor and
9 the Legislature on the costs and benefits of net energy metering,
10 wind energy co-metering, and co-energy metering to participating
11 customers and nonparticipating customers and with options to
12 replace the economic costs and benefits of net energy metering,
13 wind energy co-metering, and co-energy metering with a
14 mechanism that more equitably balances the interests of
15 participating and nonparticipating customers, and that incorporates
16 the findings of the report on economic and environmental costs
17 and benefits of net metering required by subdivision (n).

18 (d) Every ~~electricity distribution utility or cooperative~~ *electric*
19 *utility* shall make all necessary forms and contracts for net energy
20 metering *and net surplus electricity compensation* service available
21 for download from the Internet.

22 (e) (1) Every ~~electricity distribution utility or cooperative~~
23 *electric utility* shall ensure that requests for establishment of net
24 energy metering *and net surplus electricity compensation* are
25 processed in a time period not exceeding that for similarly situated
26 customers requesting new electric service, but not to exceed 30
27 working days from the date it receives a completed application
28 form for net energy metering service *or net surplus electricity*
29 *compensation*, including a signed interconnection agreement from
30 an eligible customer-generator and the electric inspection clearance
31 from the governmental authority having jurisdiction.

32 (2) Every ~~electricity distribution utility or cooperative~~ *electric*
33 *utility* shall ensure that requests for an interconnection agreement
34 from an eligible customer-generator are processed in a time period
35 not to exceed 30 working days from the date it receives a completed
36 application form from the eligible customer-generator for an
37 interconnection agreement.

38 (3) If an ~~electricity distribution utility or cooperative~~ *electric*
39 *utility* is unable to process a request within the allowable timeframe
40 pursuant to paragraph (1) or (2), it shall notify the eligible

1 customer-generator and the ratemaking authority of the reason for
2 its inability to process the request and the expected completion
3 date.

4 (f) (1) If a customer participates in direct transactions pursuant
5 to paragraph (1) of subdivision (b) of Section 365 with an electric
6 service provider that does not provide distribution service for the
7 direct transactions, the ~~electricity distribution utility or cooperative~~
8 *electric utility* that provides distribution service for ~~an~~ *the* eligible
9 customer-generator is not obligated to provide net energy metering
10 *or net surplus electricity compensation* to the customer.

11 (2) If a customer participates in direct transactions pursuant to
12 paragraph (1) of subdivision (b) of Section 365 with an electric
13 service provider, and the customer is an eligible
14 customer-generator, the ~~electricity distribution utility or cooperative~~
15 *electric utility* that provides distribution service for the direct
16 transactions may recover from the customer's electric service
17 provider the incremental costs of metering and billing service
18 related to net energy metering *and net surplus electricity*
19 *compensation* in an amount set by the ratemaking authority.

20 (g) Except for the time-variant kilowatthour pricing portion of
21 any tariff adopted by the commission pursuant to paragraph (4) of
22 subdivision (a) of Section 2851, each net energy metering contract
23 or tariff shall be identical, with respect to rate structure, all retail
24 rate components, and any monthly charges, to the contract or tariff
25 to which the same customer would be assigned if the customer did
26 not use an eligible solar or wind electrical generating facility,
27 except that eligible customer-generators shall not be assessed
28 standby charges on the electrical generating capacity or the
29 kilowatthour production of an eligible solar or wind electrical
30 generating facility. The charges for all retail rate components for
31 eligible customer-generators shall be based exclusively on the
32 *eligible* customer-generator's net kilowatthour consumption over
33 a 12-month period, without regard to the customer-generator's
34 choice as to *from* whom it purchases electricity that is not
35 self-generated. Any new or additional demand charge, standby
36 charge, customer charge, minimum monthly charge,
37 interconnection charge, or any other charge that would increase
38 an eligible customer-generator's costs beyond those of other
39 customers who are not eligible customer-generators in the rate
40 class to which the eligible customer-generator would otherwise

1 be assigned if the customer did not own, lease, rent, or otherwise
2 operate an eligible solar or wind electrical generating facility ~~are~~
3 *is* contrary to the intent of this section, and shall not form a part
4 of net energy metering contracts or tariffs.

5 (h) For ~~eligible residential and small commercial~~
6 customer-generators, the net energy metering calculation shall be
7 made by measuring the difference between the electricity supplied
8 to the eligible customer-generator and the electricity generated by
9 the eligible customer-generator and fed back to the electric grid
10 over a 12-month period. The following rules shall apply to the
11 annualized net metering calculation:

12 (1) The ~~eligible residential or small commercial~~
13 customer-generator shall, at the end of each 12-month period
14 following the date of final interconnection of the eligible
15 customer-generator's system with an ~~electricity distribution utility~~
16 ~~or cooperative electric utility~~, and at each anniversary date
17 thereafter, be billed for electricity used during that 12-month
18 period. The ~~electricity distribution utility or cooperative electric~~
19 *utility* shall determine if the eligible residential or small commercial
20 customer-generator was a net consumer or a net ~~producer of~~
21 ~~electricity surplus customer-generator~~ during that period.

22 (2) At the end of each 12-month period, where the electricity
23 supplied during the period by the ~~electricity distribution utility or~~
24 ~~cooperative electric utility~~ exceeds the electricity generated by the
25 eligible residential or small commercial customer-generator during
26 that same period, the eligible residential or small commercial
27 customer-generator is a net electricity consumer and the ~~electricity~~
28 ~~distribution utility or cooperative electric utility~~ shall be owed
29 compensation for the eligible customer-generator's net kilowatthour
30 consumption over that 12-month period. The compensation owed
31 for the eligible residential or small commercial
32 customer-generator's consumption shall be calculated as follows:

33 (A) For all eligible customer-generators taking service under
34 contracts or tariffs employing "baseline" and "over baseline" rates
35 ~~or charges~~, any net monthly consumption of electricity shall be
36 calculated according to the terms of the contract or tariff to which
37 the same customer would be assigned to, or be eligible for, if the
38 customer was not an eligible customer-generator. If those same
39 customer-generators are net generators over a billing period, the
40 net kilowatthours generated shall be valued at the same price per

1 kilowatthour as the ~~electricity distribution utility or cooperative~~
2 *electric utility* would charge for the baseline quantity of electricity
3 during that billing period, and if the number of kilowatthours
4 generated exceeds the baseline quantity, the excess shall be valued
5 at the same price per kilowatthour as the ~~electricity distribution~~
6 ~~utility or cooperative~~ *electric utility* would charge for electricity
7 over the baseline quantity during that billing period.

8 (B) For all eligible customer-generators taking service under
9 contracts or tariffs employing ~~“time-of-use” rates or charges~~
10 *time-of-use rates*, any net monthly consumption of electricity shall
11 be calculated according to the terms of the contract or tariff to
12 which the same customer would be assigned to, or be eligible for,
13 if the customer was not an eligible customer-generator. When those
14 same customer-generators are net generators during any discrete
15 time-of-use period, the net kilowatthours produced shall be valued
16 at the same price per kilowatthour as the ~~electricity distribution~~
17 ~~utility or cooperative~~ *electric utility* would charge for retail
18 kilowatthour sales during that same ~~“time-of-use”~~ *time-of-use*
19 period. If the eligible customer-generator’s ~~“time-of-use”~~
20 *time-of-use* electrical meter is unable to measure the flow of
21 electricity in two directions, ~~subparagraph (A) of paragraph (1) of~~
22 subdivision (c) shall apply.

23 (C) For all eligible residential and small commercial
24 customer-generators and for each billing period, the net balance
25 of moneys owed to the ~~electricity distribution utility or cooperative~~
26 *electric utility* for net consumption of electricity or credits owed
27 to the eligible customer-generator for net generation of electricity
28 shall be carried forward as a monetary value until the end of each
29 12-month period. For all eligible commercial, industrial, and
30 agricultural customer-generators, the net balance of moneys owed
31 shall be paid in accordance with the ~~electricity distribution utility~~
32 ~~or cooperative’s~~ *electric utility’s* normal billing cycle, except that
33 if the eligible commercial, industrial, or agricultural
34 customer-generator is a net electricity producer over a normal
35 billing cycle, any excess kilowatthours generated during the billing
36 cycle shall be carried over to the following billing period as a
37 monetary value, calculated according to the procedures set forth
38 in this section, and appear as a credit on the eligible *commercial,*
39 *industrial, or agricultural* customer-generator’s account, until the
40 end of the annual period when paragraph (3) shall apply.

(3) At the end of each 12-month period, where the electricity generated by the eligible customer-generator during the 12-month period exceeds the electricity supplied by the ~~electricity distribution utility or cooperative~~ *electric utility* during that same period, the eligible customer-generator is a net ~~electricity producer and the electricity distribution utility or cooperative~~ *surplus customer-generator* and the *electric utility* shall, upon an affirmative election by the eligible customer-generator, either (A) provide net surplus electricity compensation for any net surplus electricity generated during the prior 12-month period, or (B) allow the eligible customer-generator to apply the net surplus electricity as a credit for kilowatthours subsequently supplied by the *electric utility* to the surplus customer-generator. For an eligible customer-generator that does not affirmatively elect to receive service pursuant to net surplus electricity compensation, the *electric utility* shall retain any excess kilowatthours generated during the prior 12-month period. The eligible customer-generator not affirmatively electing to receive service pursuant to net surplus electricity compensation shall not be owed any compensation for ~~those excess kilowatthours~~ *the net surplus electricity* unless the ~~electricity distribution utility or cooperative~~ *electric utility* enters into a purchase agreement with the eligible customer-generator for those excess kilowatthours. *Every electric utility shall, by January 31, 2010, provide notice to eligible customer-generators that they are eligible to receive net surplus electricity compensation for net surplus electricity, that they must elect to receive net surplus electricity compensation, and that the 12-month period commences when the electric utility receives the eligible customer-generator's election. The commission may, for an electric utility that is an electrical corporation or electrical cooperative, adopt requirements for providing notice and the manner by which eligible customer-generators may elect to receive net surplus electricity compensation.*

(4) (A) The ratemaking authority shall, by January 1, 2011, establish a net surplus electricity compensation valuation to compensate the net surplus customer-generator for the value of net surplus electricity generated by the net surplus customer-generator. The commission shall establish the valuation in a ratemaking proceeding. The ratemaking authority for a local publicly owned electric utility shall establish the valuation in a

1 *public proceeding. The net surplus electricity compensation*
2 *valuation shall be established so as to provide the net surplus*
3 *customer-generator just and reasonable compensation for the*
4 *value of net surplus electricity, while leaving other ratepayers*
5 *unaffected. The ratemaking authority shall determine whether the*
6 *compensation will include, where appropriate justification exists,*
7 *either or both of the following components:*

8 *(i) The value of the electricity itself.*

9 *(ii) The value of the renewable attributes of the electricity.*

10 *(B) In establishing the rate pursuant to subparagraph (A), the*
11 *ratemaking authority shall ensure that the rate does not result in*
12 *a shifting of costs between solar customer-generators and other*
13 *bundled service customers.*

14 *(5) (A) Upon adoption of the net surplus electricity*
15 *compensation rate by the ratemaking authority, any renewable*
16 *energy credit, as defined in Section 399.12, for net surplus*
17 *electricity purchased by the electric utility shall belong to the*
18 *electric utility. Any renewable energy credit associated with*
19 *electricity generated by the eligible customer-generator that is*
20 *utilized by the eligible customer-generator shall remain the*
21 *property of the eligible customer-generator.*

22 *(B) Upon adoption of the net surplus electricity compensation*
23 *rate by the ratemaking authority, the net surplus electricity*
24 *purchased by the electric utility shall count toward the electric*
25 *utility's renewables portfolio standard annual procurement targets*
26 *for the purposes of paragraph (1) of subdivision (b) of Section*
27 *399.15, or for a local publicly owned electric utility, the renewables*
28 *portfolio standard annual procurement targets established pursuant*
29 *to Section 387.*

30 ~~*(4)*~~

31 ~~*(6) The electricity distribution utility or cooperative electric*~~
32 ~~*utility shall provide every eligible residential or small commercial*~~
33 ~~*customer-generator with net electricity consumption and net*~~
34 ~~*surplus electricity generation information with each regular bill.*~~
35 ~~*That information shall include the current monetary balance owed*~~
36 ~~*the electricity distribution utility or cooperative electric utility for*~~
37 ~~*net electricity consumed, or the current amount of excess electricity*~~
38 ~~*produced net surplus electricity generated, since the last 12-month*~~
39 ~~*period ended. Notwithstanding this subdivision, an electricity*~~

1 ~~distribution utility or cooperative~~ *electric utility* shall permit that
2 customer to pay monthly for net energy consumed.

3 (5)

4 (7) If an eligible residential or small commercial
5 customer-generator terminates the customer relationship with the
6 ~~electricity distribution utility or cooperative~~ *electric utility*, the
7 ~~electricity distribution utility or cooperative~~ *electric utility* shall
8 reconcile the eligible customer-generator's consumption and
9 production of electricity during any part of a 12-month period
10 following the last reconciliation, according to the requirements set
11 forth in this subdivision, except that those requirements shall apply
12 only to the months since the most recent 12-month bill.

13 (6)

14 (8) If an electric service provider or ~~electricity distribution utility~~
15 ~~or cooperative~~ *electric utility* providing net energy metering to a
16 residential or small commercial customer-generator ceases
17 providing that electric service to that customer during any
18 12-month period, and the customer-generator enters into a new
19 net energy metering contract or tariff with a new electric service
20 provider or ~~electricity distribution utility or cooperative~~ *electric*
21 *utility*, the 12-month period, with respect to that new electric
22 service provider or ~~electricity distribution utility or cooperative~~
23 *electric utility*, shall commence on the date on which the new
24 electric service provider or ~~electricity distribution utility or~~
25 ~~cooperative~~ *electric utility* first supplies electric service to the
26 customer-generator.

27 (i) Notwithstanding any other provisions of this section, the
28 following provisions shall apply to an eligible customer-generator
29 with a capacity of more than 10 kilowatts, but not exceeding one
30 megawatt, that receives electric service from a local publicly owned
31 electric utility that has elected to utilize a co-energy metering
32 program unless the local publicly owned electric utility chooses
33 to provide service for eligible customer-generators with a capacity
34 of more than 10 kilowatts in accordance with subdivisions (g) and
35 (h):

36 (1) The eligible customer-generator shall be required to utilize
37 a meter, or multiple meters, capable of separately measuring
38 electricity flow in both directions. All meters shall provide
39 ~~"time-of-use"~~ *time-of-use* measurements of electricity flow, and
40 the customer shall take service on a time-of-use rate schedule. If

1 the existing meter of the eligible customer-generator is not a
2 time-of-use meter or is not capable of measuring total flow of
3 energy in both directions, the eligible customer-generator shall be
4 responsible for all expenses involved in purchasing and installing
5 a meter that is both time-of-use and able to measure total electricity
6 flow in both directions. This subdivision shall not restrict the ability
7 of an eligible customer-generator to utilize any economic incentives
8 provided by a ~~government~~ *governmental* agency or an ~~electricity~~
9 ~~distribution utility or cooperative~~ *electric utility* to reduce its costs
10 for purchasing and installing a time-of-use meter.

11 (2) The consumption of electricity from the local publicly owned
12 electric utility shall result in a cost to the eligible
13 customer-generator to be priced in accordance with the standard
14 rate charged to the eligible customer-generator in accordance with
15 the rate structure to which the customer would be assigned if the
16 customer did not use an eligible solar or wind electrical generating
17 facility. The generation of electricity provided to the local publicly
18 owned electric utility shall result in a credit to the eligible
19 customer-generator and shall be priced in accordance with the
20 generation component, established under the applicable structure
21 to which the customer would be assigned if the customer did not
22 use an eligible solar or wind electrical generating facility.

23 (3) All costs and credits shall be shown on the eligible
24 customer-generator's bill for each billing period. In any months
25 in which the eligible customer-generator has been a net consumer
26 of electricity calculated on the basis of value determined pursuant
27 to paragraph (2), the customer-generator shall owe to the local
28 publicly owned electric utility the balance of electricity costs and
29 credits during that billing period. In any billing period in which
30 the eligible customer-generator has been a net producer of
31 electricity calculated on the basis of value determined pursuant to
32 paragraph (2), the local publicly owned electric utility shall owe
33 to the eligible customer-generator the balance of electricity costs
34 and credits during that billing period. Any net credit to the eligible
35 customer-generator of electricity costs may be carried forward to
36 subsequent billing periods, provided that a local publicly owned
37 electric utility may choose to carry the credit over as a kilowatthour
38 credit consistent with the provisions of any applicable contract or
39 tariff, including any differences attributable to the time of
40 generation of the electricity. At the end of each 12-month period,

1 the local publicly owned electric utility may reduce any net credit
2 due to the eligible customer-generator to zero.

3 (j) (I) A solar or wind turbine electrical generating system, or
4 a hybrid system of both, used by an eligible customer-generator
5 shall meet all applicable safety and performance standards
6 established by the National Electrical Code, the Institute of
7 Electrical and Electronics Engineers, and accredited testing
8 laboratories, including Underwriters Laboratories and, where
9 applicable, rules of the commission regarding safety and reliability.
10 A customer-generator whose solar or wind turbine electrical
11 generating system, or a hybrid system of both, meets those
12 standards and rules shall not be required to install additional
13 controls, perform or pay for additional tests, or purchase additional
14 liability insurance.

15 (2) *On and after July 1, 2010, a contractor holding a class C-46*
16 *license issued by the Contractors' State License Board shall not*
17 *construct, alter, or install, for an eligible customer-generator*
18 *generating electricity under a tariff or contract pursuant to this*
19 *section, a solar photovoltaic electrical generating facility with the*
20 *capacity to generate greater than 250 kilowatts of electricity.*
21 *Contractors holding class C-46 licenses as of January 1, 2010,*
22 *shall be deemed qualified to take the class C-10 license*
23 *examination.*

24 (k) If the commission determines that there are cost or revenue
25 obligations for an electric corporation, as defined in Section 218,
26 that may not be recovered from customer-generators acting
27 pursuant to this section, those obligations shall remain within the
28 customer class from which any shortfall occurred and may not be
29 shifted to any other customer class. Net energy metering and
30 co-energy metering customers shall not be exempt from the public
31 goods charges imposed pursuant to Article 7 (commencing with
32 Section 381), Article 8 (commencing with Section 385), or Article
33 15 (commencing with Section 399) of Chapter 2.3 of Part 1. In its
34 report to the Legislature, the commission shall examine different
35 methods to ensure that the public goods charges remain
36 nonbypassable.

37 (l) A net energy metering, co-energy metering, or wind energy
38 co-metering customer shall reimburse the Department of Water
39 Resources for all charges that would otherwise be imposed on the
40 customer by the commission to recover bond-related costs pursuant

1 to an agreement between the commission and the Department of
2 Water Resources pursuant to Section 80110 of the Water Code,
3 as well as the costs of the department equal to the share of the
4 department's estimated net unavoidable power purchase contract
5 costs attributable to the customer. The commission shall
6 incorporate the determination into an existing proceeding before
7 the commission, and shall ensure that the charges are
8 nonbypassable. Until the commission has made a determination
9 regarding the nonbypassable charges, net energy metering,
10 co-energy metering, and wind energy co-metering shall continue
11 under the same rules, procedures, terms, and conditions as were
12 applicable on December 31, 2002.

13 (m) In implementing the requirements of subdivisions (k) and
14 (l), ~~a an eligible~~ customer-generator shall not be required to replace
15 its existing meter except as set forth in ~~subparagraph (A) of~~
16 paragraph (1) of subdivision (c), nor shall the ~~electricity distribution~~
17 ~~utility or cooperative~~ *electric utility* require additional measurement
18 of usage beyond that which is necessary for customers in the same
19 rate class as the eligible customer-generator.

20 (n) It is the intent of the Legislature that the Treasurer
21 incorporate net energy metering, *including net surplus electricity*
22 *compensation*, co-energy metering, and wind energy co-metering
23 projects undertaken pursuant to this section as sustainable building
24 methods or distributive energy technologies for purposes of
25 evaluating low-income housing projects.

26 *SEC. 4. (a) Section 2 of this bill incorporates amendments to*
27 *Section 2827 of the Public Utilities Code proposed by both this*
28 *bill and SB 7. It shall only become operative if (1) both bills are*
29 *enacted and become effective on or before January 1, 2010, (2)*
30 *each bill amends Section 2827 of the Public Utilities Code, and*
31 *(3) this bill is enacted after SB 7, in which case Sections 1 and 3*
32 *of this bill shall not become operative.*

33 *(b) Section 3 of this bill incorporates amendments to Section*
34 *2827 of the Public Utilities Code proposed by both this bill and*
35 *AB 920. It shall only become operative if (1) both bills are enacted*
36 *and become effective on or before January 1, 2010, (2) each bill*
37 *amends Section 2827 of the Public Utilities Code, and (3) this bill*

- 1 *is enacted after AB 920, in which case Sections 1 and 2 of this bill*
- 2 *shall not become operative.*

O